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I, Christa M. Anderson, declare as follows:

- 1. I am a partner in the law firm of Keker & Van Nest LLP, counsel to Google Inc. ("Google") in the present case. Unless otherwise stated, I have personal knowledge of the facts set forth herein, and if called to testify as a witness thereto could do so competently under oath.
- 2. I submit this declaration in response to the Court's Order re Follow-up from Hearing on August 17, 2016 (ECF 2036), requiring submission of a "sworn statement explaining why the discovery responses referenced in Court yesterday were not updated, including the full extent to which counsel knew Google's intention to launch a full version of Marshmallow, including the Google Play Store, for Chrome OS." I set forth below in paragraphs three and four an overview that addresses the Court's inquiry, and provide further details, including citations to documents produced to Oracle during the discovery period and testimony provided by Google witnesses during the discovery period, in paragraphs five through forty-seven.

I. OVERVIEW

- 3. At the August 17 hearing, the gravamen of Oracle's argument was that Google should have supplemented its discovery responses to inform Oracle of its plans to enable Android applications (which are available on the Google Play Store) to run on laptops or desktops that use Google's Chrome OS as their operating system. *See, e.g.* ECF 2037 38:8-9 ("They didn't disclose it, despite diligent discovery requests."). In response to Oracle's motion and the Court's inquiry, I have reviewed relevant information made available to Oracle during the discovery period, including Google's discovery responses, the parties' meet-and-confer correspondence, documents produced by Google, and deposition transcripts of Google witnesses, which (among other things) disclosed to Oracle Google's ongoing efforts and plans to build software allowing Android applications, (which are available on the Google Play Store) to run on desktops and laptops that use Chrome OS.
- 4. Based on the information I reviewed, I have confirmed and believe that the Google discovery responses at issue were proper and did not require further supplementation for the reasons I will now discuss. In the paragraphs below, I summarize documents, deposition testimony, and other information relevant to the Court's inquiry.

II. BACKGROUND

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5. In order to understand the bases for my belief that Google's discovery responses did not require supplementation, I have set out the below information about the status of the ARC project, the latest version of ARC (known as ARC++ internally at Google), and the information made available to Oracle during discovery concerning the ARC project, ARC++, and Google's plans to make Android applications available through use of those products on desktops and laptops that use Chrome OS. This information is set forth below, and the relevant documents are attached hereto.

A. Information made available to Oracle during discovery about Google's plans to make Android applications available on Chrome OS devices.

6. During the discovery period in this case, there was significant information available to Oracle about Google's intentions, plans and efforts to make Android applications available on devices running the Chrome operating system (such as Chromebook laptops). For example, as reflected in ECF 1999-16, Google publicly announced an earlier iteration of the App Runtime for Chrome ("ARC") project at the annual Google I/O developer conference in June 2014. In that announcement, Google's then-head of Chrome explained that Google had been working on a project to "connect your phone and your Chromebook." Id., Ex. OO-1 at 84. He noted that "this is a difficult challenge technically, so we've been working on this project for a while. Our goal is to bring your favorite Android applications in a thoughtful manner to Chromebooks." Id. (emphasis added). He further explained that "[w]e want this to be intuitive for users. These applications were built for Android for the phone, so we want them to work when there is a mouse, keyboard and touch events, et cetera. For developers, we want this to work with as little modifications as possible." *Id.*. He also noted that Google was "very, very excited about bringing important, favorite Android applications [to users] for uses straight on their Chromebooks, so that they can get an even more connected experience. And we are working on bringing our experiences across both Android and Chrome together, so that it looks in a delightful way for our users." Id. at 86 (emphasis added). Oracle was aware of this

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announcement during the discovery period, as it cited press articles describing the announcement in its damages expert's report. See ECF 1560-12 (Malackowski Opening Report) ¶ 172 n.351.

- 7. Google then publicly announced the first Android apps available to be run on Chrome OS using the ARC technology in a September 2014 blogpost on the Google Chrome blog (https://chrome.googleblog.com/2014/09/first-set-of-android-apps-coming-to.html). A true and correct copy of that blogpost is attached as Exhibit 1. The title of the blogpost was "First set of Android apps coming to a Chromebook near you." The blogpost stated that "Today, we're making Chromebooks even more mobile by bringing the first set of Android apps to Chrome OS." The blogpost further stated: "These first apps are the result of a project called the App Runtime for Chrome (Beta), which we announced earlier this summer at Google I/O. Over the coming months, we'll be working with a select group of Android developers to add more of your favorite apps so you'll have a more seamless experience across your Android phone and Chromebook." Id. (Emphasis added). Oracle was aware of this blogpost as it cited it in the expert report of its technical expert Robert Zeidman ("Zeidman Report"). ECF No. 2012-2 at ¶ 129 n.10.
- 8. Google provided instructions and documentation on the public Chrome developer website explaining how developers could use ARC to enable Android apps to run on Chrome OS. (https://developer.chrome.com/apps/getstarted_arc). A true and correct copy of a webpage providing such instructions and documentation is attached as Exhibit 2. The webpage is titled "Getting Started with ARC" and explains: "The App Runtime for Chrome (Beta), or ARC, lets you run your favorite Android apps on Chrome OS." Id. (emphasis added). Oracle was aware of this webpage too as it was also cited in the expert report of Mr. Zeidman. ECF No. 2012-2 (Zeidman Rep.) at ¶ 126 n.7.
- 9. Moreover, internal Google documents produced to Oracle during the discovery period in this case provided further details on Google's work to make Android applications available to run on devices running Chrome. For example, a document Bates-labeled GOOG-00148195, a true and correct copy of which is attached as Exhibit 3, is titled "ARC Design Doc." It was produced to Oracle during discovery on December 2, 2015. This document is dated

February 24, 2014, and it states that "The ARC project aims to enable Android applications to run on top of the Chrome Application platform. ARC-based apps will execute in a similar fashion to Chrome applications – they are installed, have additional permissions beyond the drive-by Web, run in standalone windows, have persistent storage, and can execute in the background." *Id.* at *196 (emphasis added).

- 10. Exhibit 3 further states that "One of our goals is to make ARC as compatible with the Android platform as possible: the version of Android hosted in ARC on Chrome should pass as much of the Android Compatibility Test Suite as is appropriate and run arbitrary Android applications with few, if any, developer modifications." Id. at *196 (emphases added). The document further states: "Ultimately, ARC intends to make all public Android APIs available to ARC apps and work in a similar way or fail gracefully." Id. at *199 (emphasis added).
- 11. Google produced to Oracle the source code for ARC and a related product known as "ARC Welder" during discovery in this case, as Oracle has acknowledged in its Motion for a New Trial. ECF 1995-4 at 6. The expert report of Mr. Kemerer, Oracle's technical expert, concluded following inspection of the source code that the code contained the copyrighted material at issue in this case—the declarations and SSO for the 37 Java APIs. ECF No. 1560-10 at 17-18.
 - B. Google provided deposition testimony concerning its ongoing work to bring Android applications to Chromebook laptops and other devices running the Chrome operating system.
- 12. Google witnesses testified in deposition regarding Google's ongoing work and future plans/goals to enable Android apps to run on Chrome OS, including but not limited to the ARC project. For example, 30(b)(6) witness Felix Lin, Director of Project Management at Google, testified about Google's ongoing work in this area:
 - Q. Is it true that Google is now considering or has been recently considering whether to reunite its two operating systems [Android and Chrome OS] so that it is offering only a single operating system to the marketplace?
 - A. Well, we've been looking at, you know, bringing capabilities of Android to Chrome OS so that we can run applications written for Android on Chrome OS, and we've been looking at ways of

1 2	bringing features of Chrome OS to Android, but specifically having the end goal of what you described being only one OS, that's not a specific goal.	
3	Exhibit 4 (Lin Dec. 14, 2015 Dep. Tr.) at 16:2-14 (objection omitted) (emphasis added). Mr. Lin	
4	also testified regarding Google's future goals for running Android apps on Chrome OS:	
5	Q. Does ARC, the app runtime for Chrome, support all of the libraries available on Android?	
6	A. I believe our goal is to support as much as possible, but I don't	
7	believe that we've been able to, as of this time – as of this point in time.	
8	Id. at 115:9-16 (objection omitted) (emphasis added). Mr. Lin further testified that:	
9	Q. And focusing on the features of Android that you're going to	
10	bring to Chromebooks, the key for that, as expressed by Mr. Burke in this email, dated April 2, 2015, is the vibrant app ecosystem, developer/framework APIs, and extensive silicon support, true?	
12	A. I think the only thing that matters to end users is their ability to run Android apps. I don't think end users care at all about	
13	framework APIs and silicon support."	
14	Exhibit 5 (Lin Dec. 18, 2015 Dep. Tr.) at 248:2-13 (objection omitted) (emphasis added).	
15	13. I am informed and believe that, in approximately September 2015, the ARC team	
16	at Google began work on and developing the design for the next version of ARC, known	
17	internally as "ARC++." As explained in Google documents that were produced to Oracle during	
18	the discovery period in this case, the goal of ARC++ was to provide Chrome OS users with	
19	access to all of the Android applications available on the Google Play Store. I am informed and	
20	believe that the Google team that created ARC++ is the same as the team that created ARC.	
21	C. Documents produced to Oracle in discovery that describe the ARC++ project	
22	14. Google produced documents to Oracle during the discovery period that explain	
23	ARC++'s relationship to the ARC project, that describe the ARC++ design and architecture, and	
24	that outline Google's future plans and goals for enabling Android apps to run on Chrome OS. I	
25	have summarized several of those documents in paragraphs fifteen through nineteen below.	
26	15. A document Bates-labeled GOOG-00458968, a true and correct copy of which is	
27	attached as Exhibit 6, is titled "ARC++ Android System Pruning." It was produced to Oracle	
28	during discovery on December 16, 2015. The document, dated September 23, 2015, describes	

both ARC and ARC++ and compares the two, stating: "ARC – running as a Chrome Application – has a modified Android runtime / frameworks with several services disabled or stubbed out, as some services do not make sense within the context of ARC," and "For ARC++, the architecture will be closer to an actual Android device, with a single instance of System Server running per device." *Id.* at *969. The document further states: "*ARC++ provides an Android runtime on Chrome OS devices, running alongside Chrome OS." <i>Id.* (emphasis added).

- 16. A document Bates-labeled GOOG-00203783, a true and correct copy of which is attached as Exhibit 7, is titled "ARC++ DRAFT October 7th, 2015." It was produced to Oracle during discovery on December 9, 2015. It notes that "Android Runtime for Chrome (ARC) was launched at IO in 2014 with a few curated applications" and that "the very early prototypes had Android and the Chrome OS UI stack running in parallel. Since then, we have been playing with different concepts and decided that for ARC++ it is acceptable to have both systems running at once with the objective that the user can launch any maximized window instantly." Id. at *784 (emphases added). The document lists the goals of ARC++ to "Provide Chrome OS users with Play Android apps on Chrome OS without developer action" and to "[s]hip early next year." Id. at *785 (emphasis added). It also states: "The platform architecture is based on a Chrome OS container with Android on top of Chrome OS user space." Id.
- 17. A document Bates-labeled GOOG-00512401, a true and correct copy of which is attached as Exhibit 8, is titled "2016 Strategy Android, ChromeOS, Cast." It was produced to Oracle during discovery on December 16, 2015. A heading on page *404 of the document states: "Chrome OS / Project Andromeda." The first bullet point beneath that heading states: "Product excellence: bring together the best of Chrome OS and Android." *Id.* at *404 (underlining in original). Beneath that bullet point, the document states: "ARC++: Enable entire Android app ecosystem for Chrome OS devices built in 2015 and beyond." *Id.* (emphasis added).
- 18. A document Bates-labeled GOOG-00334416, a true and correct copy of which is attached as <u>Exhibit 9</u>, is titled "ARC++ Google Auth" and is dated October 21, 2015. It was produced to Oracle during discovery on December 16, 2015. The "Background" section of the document states: "ARC++ runs Android in an isolated container inside Chrome OS using

similar technology of Docker that Linux kernel supports, *e.g.*, namespacing. Inside the container should be effectively another Linux environment, similar to on an actual device." *Id.* at *417 (footnote omitted and emphasis added).

- 19. A document Bates-labeled GOOG-00334395, a true and correct copy of which is attached as Exhibit 10, is titled "ARC++ Architecture Overview." It was produced to Oracle during discovery on December 16, 2015. Beneath the "Goals" heading on page *395, the document states: "Full Play Store access." (emphasis added). Beneath the "Overview" heading the document states: Android apps will appear alongside Chrome apps and bookmarks in the launcher. The android framework will be run mostly intact in a manner similar to how a container is run with docker, runc, lxc, etc." Id. at *395-396
- 20. Google produced several other documents regarding ARC++ during the discovery period. Attached as Exhibits 11-14 are additional examples of those documents, all of which were produced to Oracle prior to the close of fact discovery on December 16, 2015.

D. Google's May 19, 2016 announcement regarding the Play Store on Chrome

21. Google announced its plans to release in the future ARC++ technology in a May 19, 2016 blogpost on the public Chrome Blog. A true and correct copy of that blogpost is attached as Exhibit 15 (https://chrome.googleblog.com/2016/05/the-google-play-store-coming-to.html). The blogpost is titled "The Google Play store, coming to a Chromebook near you." Though the blogpost does not use the name "ARC++," I am informed and believe that it describes the project known internally at Google as ARC++. The blogpost states: "So, we're bringing Google Play (the most popular app store in the world) to Chromebooks." As stated above, internal Google documents produced to Oracle in this case explain that the goal of the ARC++ project was to "Provide Chrome OS users with Play Android apps on Chrome OS without developer action." *Supra*, Ex. 7 at *785. The table below compares aspects of Google's May 19, 2016 announcement with some of the internal Google documents related to ARC++ produced to Oracle during discovery in this case and referenced above:

1	Google Documents Produced to Oracle in December 2015	Google May 19, 2016 Announcement
2	Strategy to "Bring together the best of Chrome	"[B]y bringing together the best of Android and
3	OS and Android." Ex. 8 at *404	Chrome OS, we are taking a big leap forward." Ex. 15
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5	ARC ++ goal to provide "Full Play Store access." Ex. 10 at *395.	"So, we're bringing Google Play (the most popular app store in the world) to Chromebooks." <i>Id</i> .
6		Chromebooks. 1a.
7	"ARC++: Enable entire Android app ecosystem for Chrome OS devices built in 2015	"The same apps that run on phones and tablets can now run on Chromebooks without
8	and beyond." Ex. 8 at *404.	compromising their speed, simplicity or security." <i>Id</i> .
	Cool to "Drovido Chromo OC years with Play	"This is an add for young and supply for developing
10	Goal to "Provide Chrome OS users with Play Android apps on Chrome OS without developer	"This is good for users and great for developers - in addition to phones and tablets, they will be
11	action." Ex. 7 at *785	able to easily bring their apps to laptops." <i>Id</i> .
12	Goal to "[s]hip early next year." Ex. 7 at *785	"Google Play will start rolling out in the developer channel with M53 on the ASUS
13		Chromebook Flip, the Acer Chromebook R 11
14		and the latest Chromebook Pixel." <i>Id</i> .
15	"The platform architecture is based on a Chrome OS container with Android on top of	"And all this is built on top of Chrome OS, so users will continue to have everything they love
16	Chrome OS user space." Ex. 7 at *785.	in their Chromebooks." <i>Id</i> .
17	Google's announcement of ARC++ came on the	second day of its annual developer conference,
18	known as "Google I/O." Google held this year's	Google I/O developer conference from May 18-
19	20, 2016.	
20	22. At the time of Google's May 19, 2	2016 announcement, the development of ARC++
21	had progressed to the point that Google was able	to provide a demonstration of its functionality at

At the time of Google's May 19, 2016 announcement, the development of ARC++ had progressed to the point that Google was able to provide a demonstration of its functionality at Google I/O on May 19, *see* ECF No. 1998-10. I am informed and believe that at the time of the announcement, the full ARC++ code was not complete or otherwise ready to be released to the public at that time. Indeed, Google's May 19 announcement of ARC++ states that Google "will start rolling out" a public experimental version of the code "in the developer channel with [the] M53" release to certain Chromebooks at some undetermined point in the future. *See* Ex. 15 (emphasis added). The relevant online support page for Chrome OS explains that the "developer channel," or "Dev channel," refers to "a more experimental version" of Chrome OS than the

fully-tested "Stable" channel that an end user will encounter by default. See Exhibit 16
(https://support.google.com/chromebook/answer/1086915). In order to receive the developer
channel version of Chrome OS, an end user must affirmatively select the option to switch to the
developer channel after clicking on "Settings > About Chrome OS." Id. In addition, I am
informed and believe that Google continued to make changes to ARC++ code after Google I/O.
Accordingly, on information and belief, I understand that the code for ARC++ was not ready for
external release until on or around June 15, 2016, when Google released the experimental
"developer channel" version of ARC++ to the public. See Exhibit 17
(http://googlechromereleases.blogspot.com/search?updated-max=2016-06-15T17:16:00-07:00)
(noting that "[t]he dev channel has been updated to 53.0.2767.3," which corresponds with the
reference to the "M53" release in Google's May 19 announcement). I further understand, on
information and belief, that the ARC++ technology still is not complete, or "stable," and that
Google will not make it available in a stable release of Chrome OS for certain Chromebooks until
later this year.

E. Google's Outside Counsel's knowledge of ARC and ARC++

- 23. The Court instructed me to address "the full extent to which counsel knew Google's intention to launch a full version of Marshmallow, including the Google Play Store, for Chrome OS." ECF 2036. I wish to note, upon information and belief, that the ARC++ functionality which is the subject of Oracle's Motion for a New Trial did not contain a "full version of Marshmallow" "for Chrome OS." I understand and believe that the runtime for (the Marshmallow version of) Android that can be run inside of Chrome OS does not include the Linux Kernel at the bottom of the Android stack, and does not include the Application Framework layer at the top of the stack. I also wish to note, upon information and belief, that the Google Play Store is not part of (the Marshmallow version of) Android, but is rather a separate application that is available for Android. Subject to these caveats, I address below the Court's questions.
- 24. Google's outside counsel in this matter was aware of the original version of the ARC project at least as early as August 2015, when Oracle's counsel inquired about a related

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product known as ARC Welder. Google produced the source code for ARC and ARC Welder during discovery.

- 25. Google's outside counsel was also aware from defending depositions taken by Oracle in this case, that Google was "looking at . . . bringing capabilities of Android to Chrome OS so that we can run applications written for Android on Chrome OS," and that it was Google's goal to support as many Android libraries as possible through the ARC project. Supra, Ex. 4 (Lin Dec. 14, 2015 Dep. Tr.) at 16:7-14, 115:9-16.
- 26. Google's outside counsel was not aware of the development of the updated ARC++ version of the ARC project until press reports about the Google I/O announcement, and was not aware of details about the updated ARC++ version of the ARC project until researching the issue in response to Oracle's Motion for a New Trial, filed July 6, 2016. However, since Oracle filed its Motion, counsel has reviewed the ARC++ documents produced to Oracle during the discovery period and confirmed that many of those documents discuss the project in detail, as described above in paragraphs fifteen through nineteen above.

III. DISCOVERY REQUESTS REFERENCED AT THE AUGUST 17, 2016 HEARING

- 27. The Court instructed me to explain "why the discovery responses referenced in Court yesterday were not updated including the full extent to which counsel knew Google's intention to launch a full version of Marshmallow, including the Google Play Store, for Chrome OS." ECF 2036. Subject to the caveats above, I address Google's discovery responses below to those responses identified or referenced by Oracle concerning its motion. As noted above, although outside counsel was not aware of the ARC++ version of the ARC project at the time Google provided these responses, and was not aware of ARC++ until after the May 2016 I/O announcement discussed above, counsel was aware of (and produced discovery concerning) Google's stated plans to make Android apps available on Chrome OS devices, including through the ARC project and ARC Welder.
- 28. As a general matter, I understand that a party's duty to supplement discovery responses applies "if the party learns that in some material respect the disclosure or response is incomplete or incorrect, and if the additional or corrective information has not otherwise been

made known to the other parties during the discovery process or in writing." Fed. R. Civ. P. 2	26(e
(emphasis added); see also 8A Charles A. Wright & Arthur R. Miller, Fed. Prac. & Proc. §	
2049.1 (3d ed.) ("On its face, the rule only requires further disclosure if the original response	was
incomplete or incorrect 'in some material respect,' emphasizing the need to verify that the	
information was in fact requested and to guard against undue precision in scrutinizing further	r
disclosures."). I further understand that "there is no need as a matter of form to submit a	
supplemental disclosure to include information already revealed by a witness in a deposition	or
otherwise through formal discovery." Wright & Miller, Federal Practice and Procedure: Civ.	§
2049.1 (3d ed.); accord Gomez v. Am. Empress Ltd. P'ship, 189 F.3d 473, at *1 (9th Cir. 199	9)
("Supplementation of discovery responses to tell the plaintiff what the witnesses said in their	•
depositions was obviously unnecessary, because plaintiff's counsel was present at the	
depositions.").	

29. My understanding of the duty to supplement is consistent with the parties' conduct in this litigation. For example, both Google and Oracle served their most recent supplemental responses to written discovery requests in December 2015. Google served supplemental responses to Oracle's Fifth, Sixth, and Seventh set of Interrogatories to Google on December 16, 2015, the last day of fact discovery. Oracle likewise served supplemental responses to Google's Sixth, Seventh, and Eighth set of Interrogatories to Oracle on December 16, 2015. In addition, following a meet and confer between the parties on Google's RFAs to Oracle after the close of fact discovery, Oracle served a supplement response to Google's Second set of Requests for Admission to Oracle on December 22, 2015. The parties did not exchange any further written supplemental responses to discovery after that point. However, the parties continued to produce certain supplemental documents leading up through trial.

A. Requests for Production of Documents ("RFPs")

30. While Oracle did not identify any specific RFPs at the August 17, 2016 hearing, Oracle argued in its Motion for a New Trial that Google had failed to supplement its response to RFP No. 324, which requested:

Source code and DOCUMENTATION for all GOOGLE software that can be used to facilitate use of ANDROID (including software derived from ANDROID such as Brillo) on devices other than mobile phones, including by way of example and not limitation source code and documentation for Weave and source code and documentation for software related to porting ANDROID to desktop or laptop computers.

ECF No. 1998-19, Ex. Q at 4. On December 4, 2016, Google served objections to this RFP (which Oracle did not attach to its motion), noting that it was vague and ambiguous as to the phrase "related to porting." Google also "request[ed] a meet and confer with Oracle to obtain an explanation of the nature of materials sought by Oracle in this Request." Id. A true and correct copy of Google's objections is attached as <u>Exhibit 17A</u>.

- 31. On December 14, 2015, the parties held a telephonic meet and confer. Counsel for Google summarized the call in a follow-up letter to Oracle the next day, in which Google's counsel stated: "you also asked about a purported project to 'port Android to desktop.' It is unclear to what you are referring." Exhibit 18. Counsel closed the email by noting, "Please let me know if you have any further questions." *Id.* Our office has been unable to locate any follow-up correspondence from Oracle on this issue.
- 32. At the time Google answered RFP No. 324, it had already produced the source code for ARC and ARC Welder, and the then-incomplete source code for ARC++ was not responsive to the request because it called for software that "can be used to facilitate use of Android" on "devices other than mobile phones." As discussed above, at the time Google responded to this RFP, ARC++ was months away from completion so could not yet be used to "facilitate use of Android" on "devices other than mobile phones." Furthermore, as explained above, Google produced documents during the discovery period that described ARC++, and thus documents regarding ARC++ were available to Oracle. *Supra*, ¶¶ 15-19.
- 33. Notably, on February 5, 2016, after the close of fact discovery and months before the completion of ARC++, the Court ordered that: "The upcoming trial will proceed as if we were back in the original trial, but now with the instructions on fair use handed down by the court of appeals. No new copyrighted works will be allowed." ECF 1479 at 1. The Court further ruled: "Among possibly others, our trial will *not* include implementations of Android in Android TV,

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Android Auto, Android Wear, or Brillo." *Id.* at 2 (emphasis in original). And in a later order, the Court excluded all "evidence or expert testimony relating to Android Wear, Android Auto, Android TV, Brillo, or any other new implementation of Android in devices other than phones or tablets." ECF 1781 (Mem. Op. Re Google's Motion in Limine No. 2 Regarding New Products) at 5 (emphasis added). The Court's orders on this issue are discussed in more detail in Google's Opposition to Oracle's Motion for a New Trial, ECF No. 2012 at 7-8.

- 34. It is my belief that Google violated no duty to supplement document production in the period leading up through trial in May 2016 because ARC++ still was not complete at that time, trial was well under way, and the Court had already excluded evidence of uses of Android other than in phones and tablets. Furthermore, even if un-finished source code were otherwise responsive to RFP No. 324, Google made clear to Oracle during discovery that it would not produce source code for unfinished products. For example:
- i) On November 9, 2015, counsel for Google informed Oracle that RFPs relating to "future products" were overbroad and irrelevant. Counsel further stated: "Google continues to disagree that the production of documents relating to Google's future products is likely to lead to the discovery of admissible evidence in this case. However, in the spirit of compromise and in an attempt to avoid unnecessary motion practice, subject to its already stated objections, Google will collect and produce relevant executive presentations and product plans that reflect Google's plans with respect to future mobile products." A true and correct copy of counsel's November 9, 2015 email to Oracle is attached as Exhibit 19.
- ii) On December 9, 2015, counsel for Google informed Oracle on a taperecorded meet-and-confer telephone call that if a document is "solely related to, you know, something that's being planned out in the future that hasn't been released yet, um, we're not as far as I know collecting and producing those non-custodial documents on that level." A true and correct copy of an unofficial transcription by our office of an audio recording of that meet-andconfer call is attached as Exhibit 20.
- iii) On December 15, 2015, counsel for Google again informed Oracle that "as I stated on our call, Google's position on what it would produce as to future products has been

1	clear since at least November 9, 2015, when I stated that, in spite of Google's relevance
2	objections and in the spirit of compromise, Google would 'collect and produce relevant executive
3	presentations and product plans that reflect Google's plans with respect to future mobile
4	products.' Google's position has not changed, nor did [Oracle's counsel] respond to my email of
5	November 9, 2015 or ever otherwise question Google's agreement to produce." A true and
6	correct copy of counsel's December 15, 2015 email to Oracle is attached as Exhibit 18.
7	A. Interrogatories
8	35. Oracle identified three interrogatories at the August 17, 2016 hearing. ECF 2037
9	at 35:17-20 ("We asked interrogatories about it. And interrogatories 26, 27, and 29 all covered
10	this subject matter."). Oracle propounded these interrogatories on August 21, 2015. Google
11	served objections on September 4, and served its final supplemental responses on December 16.
12	Google's supplemental responses are attached as Exhibit P to Oracle's New Trial Motion.
13	36. Oracle's Interrogatory No. 26, asked:
14	"For each VERSION of ANDROID developed or released by GOOGLE since October 27, 2010, identify all ANDROID code that
15	contains or replicates code from the 37 JAVA API PACKAGES, including any DECLARING CODE or any other code contained in
16	the JAVA PLATFORM."
17	ECF 1995-12, Ex. P at 5. Google objected that the phrase "developed or released by Google"
18	was vague and ambiguous, though it responded to the interrogatory subject to those (and other)
19	objections. <i>Id.</i> Relying on Fed. R. Civ. P. 33(d), Google identified previously produced
20	documents and code repositories from which the information sought by Oracle could be derived.
21	Id. In particular, Google identified the publicly available source code for the Android Open
22	Source Project, a hard drive containing all publicly released versions of Android, and a source
23	code computer containing the source code for ARC and ARC Welder, which Google had
24	previously made available to Oracle for inspection. <i>Id</i> .
25	37. Oracle's Interrogatory No. 27, asked:
26	For any software developed or released by GOOGLE since October 27, 2010, identify all code from such software that contains or
27	replicates code from the 37 JAVA API PACKAGES."
28	ECF 1995-12, Ex. P at 6-7. Google objected that the phrase "developed or released by Google"

was vague and ambiguous, though it responded to the interrogatory subject to those (and other) objections. *Id.* Relying on Fed. R. Civ. P. 33(d), Google identified previously produced documents and code repositories from which the information sought by Oracle could be derived, and incorporated in full its response to Interrogatory No. 26.

38. Oracle's Interrogatory No. 29, asked:

"For any software based on or derived from ANDROID since October 27, 2010, identify all code from such software that contains or replicates the SSO of the 37 JAVA API PACKAGES."

ECF 1995-12, Ex. P at 9. Google objected that the phrase "any software based on or derived from Android" was vague and ambiguous, though it responded to the interrogatory subject to those (and other) objections. *Id.* Relying on Fed. R. Civ. P. 33(d), Google identified previously produced documents and code repositories from which the information sought by Oracle could be derived, and incorporated in full its response to Interrogatory No. 26.

- 39. I do not believe that Google had a duty to identify un-finished source code for ARC++ in its responses to Oracle Interrogatory Nos. 26, 27 & 29 because, at the time of those responses, the ARC++ source code was not yet developed but instead was months away from completion and Google had consistently objected to producing source code for potential future, unreleased products. Furthermore, Google already had produced documents describing ARC++ to Oracle during the discovery period.
- 40. I do not believe that Google had a duty to supplement these interrogatory responses in May 2016 because, by that time, the source code for ARC++ still was not complete, and, in any event, the trial was well under way and the Court had already (months earlier) excluded uses of Android other than phones and tablets. Furthermore, as explained above, Google had already produced documents describing the ARC++ project, including design and architecture documents, as well as documents that described Google's plans to enable Chrome OS users to access the Play Store with the entire suit of Android apps. *Supra* Exs. 6-14. And Oracle had already elicited deposition testimony regarding Google's ongoing plans to enable access to Android apps on Chrome OS. Exs. 4 & 5.

B. Request for Admission ("RFA")

1	41. The only RFA identified by Oracle at the August 17 hearing was RFA No. 281,
2	which asked Google to:
3 4	"Admit that GOOGLE intends to use some or all of ANDROID, including DECLARING CODE and SSO from the 37 JAVA API PACKAGES, to create a platform that runs on desktops and
5 6 7 8 9 10 11 12 13 14	PACKAĞES, to create a platform that runs on desktops and laptops." ECF No. 2037 at 34:11-35:1. On December 4, 2015, Google objected that the phrases "intends to use" and "platform that runs on desktops and laptops" were vague and ambiguous. In particular, like other terms in this litigation, the term "platform" can mean different things depending on the context in which it is used. Subject to these (and other) objections, Google denied this RFA because it understood the RFA to seek an admission that Google intended to merge some part or all of Android into a <i>single platform</i> or operating system to run on desktops or laptops, which is a point that Oracle repeatedly tried to establish in deposition questioning of Google's witnesses. For example, Oracle pressed Google witness Felix Lin to admit that Google intended to combine Chrome OS and Android into a united platform, and Mr. Lin explained that there was no such plan:
15 16 17 18 19 20 21 22 23 24 25 26 27 28	Q. So Mr. Burke was expressing the view that the combined platform team was a convergence of Android and Chrome OS, true? THE WITNESS: I don't think so. I think he was referring to the user view that the platforms well, the operating systems are converging because of what the user sees, but the underlying technology is not converging. Chrome OS – we've been pretty clear about this in the recent news and blog posts as well. Chrome OS is separate from Android. And although we're bringing features of and capabilities of Android to Chrome OS and features and capabilities of Chrome OS to Android, the user view might be that they are coming together, but the reality is that's superficial, and the fundamental platforms are still different. BY MS. HURST: Q. So under the hood, there will remain differences? A. That's right. BY MS. HURST:
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Q. Mr. Burke says, "Our goal is 'grand unification." Do you see that?

A. I do.

Q. So when Mr. Burke says "grand unification," you understand that to mean taking the best of both platforms for consumers; is that right?

THE WITNESS: I think he's referring to grand unification as unification of features and the user experience, not necessarily unification of all of the underlying source code.

Ex. 5 (Lin Dec. 18, 2016 Dep. Tr.) at 244:17-246:4 (emphases added) (objections removed). In response to pointed questioning from Oracle's counsel, Mr. Lin repeatedly explained that Google was not combining Chrome OS and Android into a single platform or replacing Chrome OS with Android. *See*, *e.g.*, *id.* at 244:10-246:4, 249:15-251:1: Ex. 4 (Lin Dec. 14, 2016 Dep. Tr) at 13:25-15:14, 16:2-14, 18:18-19:9, 25:2-13, 29:5-14, 106:11-109:9. Google's response to RFA No. 281 was accurate and consistent with Mr. Lin's deposition testimony. I have attached a true and correct copy of the relevant excerpts of the December 14 and 18 depositions of Mr. Lin as Exhibits 4 and 5. Notably, Mr. Lin's testimony is consistent with the documents describing the ARC++ project which, instead of suggesting that Android and Chrome merge into a single operating system, state that "*ARC++ runs Android in an isolated container inside* Chrome OS." *Supra*, Ex. 9 (emphasis added).

- 42. Notably, Google's view of the meaning and scope of RFA No. 281 is consistent with the fact that it denied the RFA while it had also identified and produced in discovery information about software products it had completed or was working on to make Android applications available on Chrome devices, as discussed more fully above. In other words, if Oracle considered this RFA response to be inaccurate in light of this other discovery disclosing both ARC and ARC++, it could have but never did raise that issue in the period leading up to and through trial.
- 43. In light of the above, I do not believe Google had a duty to change its response to RFA No. 281 because of the ARC++ project, particularly in light of discovery provided and the documents produced to Oracle that explained how ARC++ functioned.

IV. STATEMENTS MADE BY ORACLE'S COUNSEL AT THE AUGUST HEARING

- 44. On August 17, 2016, the Court held a hearing on Oracle's Rule 59 Motion for a New Trial (ECF No. 1997), which I attended. I describe below some of the statements made by Oracle's counsel at that hearing characterizing Google's discovery responses, and provide additional context for the Court's consideration of those statements.
- 45. Oracle's counsel stated that "In deposition, they described it [ARC] as a failure." ECF No. 2037 at 40:22; *see also* 65:5-8. Our office has searched for this testimony in the transcripts of the depositions taken in this case and have been unable to find any instance where a Google witness testified that ARC was a "failure." Google 30(b)(6) witness Felix Lin testified that, while Google had not gotten the traction or degree of success it would like, it had "some successes" with ARC. Ex. 4 (Lin Dec. 14, 2016 Dep. Tr.) at 21:18-19. An excerpt of Mr. Lin's testimony on this issue is attached as Exhibits 4 & 5. ARC has been available since September 2014, and remains available today. *See* Ex. 2 (https://developer.chrome.com/apps/getstarted_arc).
- 46. Oracle's counsel stated that "But this thing they announced in May is not ARC Welder. It makes clear, if you look at the transcript of their announcement which is Exhibit J1 to our Rule 59 motion this is not ARC Welder. They say 'ARC failed. It had challenges. It didn't work. So we're building a whole new platform." ECF No. 2037 at 40:1-6. However, I have reviewed Exhibit J1 to Oracle's Motion for a New Trial—which is not Google's "announcement" of ARC++ but, rather is, a transcript of a presentation at Google I/O entitled "Bring Your Android App to Chrome OS"—and the presenter did not say that "ARC failed" or that "it didn't work." *See* ECF 1998-10. He said that ARC "had some challenges for developers," and that "some apps didn't work great with this." He also went on to say, "Having said all that, we still believe that getting Android applications running as a fully integrated native Chrome OS apps [sic] was the right idea, so we made a lot of improvements and we're building a whole new platform to run Android apps on Chromebooks." *Id.* at 3-4.
- 47. Oracle's counsel stated: "If we had had the source code and come before the Court when the Court was considering the new-products issues, we would have been able to say to the Court, Your Honor, they're going to the core market for Java SE: laptops and desktops." ECF

1	No. 2037at 37-7:11. However, Oracle was well aware of this argument, and indeed made the
2	argument in the Expert Report of James Malackowski, stating: "ARC allows Google to bring
3	Android Apps to the Chrome operating system. This means Google is now using Android to
4	occupy the original, traditional market of the Java Platform." (Emphasis added). ECF 1560-12
5	(Malackowski Opening Rep.) ¶ 172 . In addition, as noted earlier, Oracle had received during
6	discovery documents describing the fact that Google was in the process of designing ARC++ to
7	allow Android application to run on Chrome OS. Ex. 7 [GOOG-00203783] at *785 (goal of
8	ARC++ to "[p]rovide Chrome OS users with Play Android apps on Chrome OS without
9	developer action") (emphasis added).
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11	I declare under penalty of perjury under the laws of the State of California that the
12	foregoing is true and correct to the best of my knowledge.
13	Executed this 25 day of August, 2016 at San Francisco, California.
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16	By: CHRISTA M. ANDERSON
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